

WHAT IS CLAIMED IS:

1 1. A method of operating a radio access network of a telecommunications
2 system, the method comprising using an omnibus release message to release plural
3 connections handled by the radio access network.

1 2. The method of claim 1, wherein the radio access network comprises a radio
2 network control (RNC) node, and wherein the method further comprises:
3 preparing the omnibus release message whereby, when a first selected parameter
4 thereof has a predetermined value, all radio connections controlled by the radio network
5 control (RNC) node are released.

1 3. The method of claim 2, wherein when the first selected parameter is in a
2 reserved range of values, all radio connections controlled by the radio network control
3 (RNC) node are released.

1 4. The method of claim 2, wherein the radio network control (RNC) node is a
2 serving radio network control (SRNC) node, and further comprising preparing the
3 omnibus release message upon failure of the serving radio network control (SRNC)
4 node.

1 5. The method of claim 2, wherein the first selected parameter is included in a
2 mobile terminal global identity information element of the omnibus release message.

1 6. The method of claim 5, wherein the first selected parameter is included in a
2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus
3 release message.

1 7. The method of claim 6, wherein the first selected parameter is a Serving
2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus
3 release message.

1 8. The method of claim 1, wherein the radio access network comprises a radio
2 network control (RNC) node, and wherein the method further comprises:

3 preparing the omnibus release message whereby, when a first selected parameter
 4 thereof has a first predetermined value and a second selected parameter thereof has a
 5 second predetermined value, all radio connections in cells controlled by the radio
 6 network control (RNC) node are released.

1 9. The method of claim 8, wherein when the first selected parameter is in a first
 2 reserved range of values, all radio connections in cells controlled by the radio network
 3 control (RNC) node are released.

1 10. The method of claim 8, wherein when the second selected parameter is in a
 2 second reserved range of values, all radio connections in cells controlled by the radio
 3 network control (RNC) node are released.

1 11. The method of claim 8, wherein the radio network control (RNC) node is a
 2 drift radio network control (DRNC) node, and further comprising preparing the
 3 omnibus release message upon failure of the drift radio network control (DRNC) node.

1 12. The method of claim 8, wherein the first selected parameter is included in a
 2 mobile terminal global identity information element of the omnibus release message.

1 13. The method of claim 12, wherein the first selected parameter is included in a
 2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus
 3 release message.

1 14. The method of claim 13, wherein the first selected parameter is in a Serving
 2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus
 3 release message.

1 15. The method of claim 8, wherein the second selected parameter is included in
 2 a parameter which identifies a serving radio network control (SRNC) node.

1 16. The method of claim 1, further comprising transmitting the omnibus release
 2 message on a common control channel (CCCH) when a mobile terminal is in a
 3 CELL_FACH state.

1 17. The method of claim 1, further comprising transmitting the omnibus release
2 message on a paging channel (PCH).

1 18. The method of claim 1, wherein the radio access network comprises a
2 serving radio network controller node and a drift radio network controller node, and
3 wherein the method further comprises:

4 sending from the serving radio network controller node to the drift radio network
5 controller node a request for release of connections with mobile terminals controlled by
6 the serving radio network controller node in cells controlled the drift radio network
7 controller node;

8 sending the omnibus release message from the drift radio network controller
9 node to base station(s) controlled by the drift radio network controller node.

1 19. The method of claim 1, wherein the radio access network comprises a
2 serving radio network controller node and a drift radio network controller node, and
3 wherein the method further comprises:

4 receiving at the drift radio network controller node an indication of a loss of
5 connection with the serving radio network controller node;

6 sending the omnibus release message from the drift radio network controller
7 node to base station(s) controlled by the drift radio network controller node with respect
8 to connections with mobile terminals controlled by the serving radio network controller
9 node in cells controlled the drift radio network controller node.

1 20. A radio access network of a telecommunications system, radio access
2 network comprising a radio network control (RNC) node which prepares a omnibus
3 release message to release plural connections handled by the radio access network.

1 21. The radio access network of claim 20, wherein when a first selected
2 parameter of the omnibus release message has a predetermined value, all radio
3 connections controlled by the radio network control (RNC) node are released.

1 22. The radio access network of claim 21, wherein when the first selected
2 parameter is in a reserved range of values, all radio connections controlled by the radio
3 network control (RNC) node are released.

1 23. The radio access network of claim 21, wherein the radio network control
2 (RNC) node is a serving radio network control (SRNC) node, and wherein the serving
3 radio network control (SRNC) node prepares the omnibus release message upon failure
4 of the serving radio network control (SRNC) node.

1 24. The radio access network of claim 21, wherein the first selected parameter is
2 included in a mobile terminal global identity information element of the omnibus
3 release message.

1 25. The radio access network of claim 24, wherein the first selected parameter is
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the
3 omnibus release message.

1 26. The radio access network of claim 25, wherein the first selected parameter is
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the
3 omnibus release message.

1 27. The radio access network of claim 20, wherein when a first selected
2 parameter of the omnibus release message has a first predetermined value and a second
3 selected parameter of the omnibus release message has a second predetermined value,
4 all radio connections in cells controlled by the radio network control (RNC) node are
5 released.

1 28. The radio access network of claim 27, wherein when the first selected
2 parameter is in a first reserved range of values, all radio connections in cells controlled
3 by the radio network control (RNC) node are released.

1 29. The radio access network of claim 27, wherein when the second selected
2 parameter is in a second reserved range of values, all radio connections in cells
3 controlled by the radio network control (RNC) node are released.

1 30. The radio access network of claim 27, wherein the radio network control
2 (RNC) node is a drift radio network control (DRNC) node, and wherein the drift radio
3 network control (DRNC) node prepares the omnibus release message upon failure of
4 the drift radio network control (DRNC) node.

1 31. The radio access network of claim 27, wherein the first selected parameter is
2 included in a mobile terminal global identity information element of the omnibus
3 release message.

1 32. The radio access network of claim 31, wherein the first selected parameter is
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the
3 omnibus release message.

1 33. The radio access network of claim 32, wherein the first selected parameter is
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the
3 omnibus release message.

1 34. The radio access network of claim 27, wherein the second selected
2 parameter is included in a parameter which identifies a serving radio network control
3 (SRNC) node.

1 35. The radio access network of claim 20, wherein the omnibus release message
2 is transmitted on a common control channel (CCCH) when a mobile terminal is in a
3 CELL_FACH state.

1 36. The radio access network of claim 20, wherein the omnibus release message
2 is transmitted on a paging channel (PCH).

1 *37. The radio access network of claim 20, further comprising a serving radio
2 network controller node and a drift radio network controller node, and wherein the
3 serving radio network controller node sends to the drift radio network controller node a
4 request for release of connections with mobile terminals controlled by the serving radio
5 network controller node in cells controlled the drift radio network controller node; and
6 wherein the drift radio network controller node sends the omnibus release message to
7 base station(s) controlled by the drift radio network controller node.

1 38. The radio access network of claim 20, further comprising a serving radio
2 network controller node and a drift radio network controller node, wherein the drift
3 radio network controller node receives an indication of a loss of connection with the
4 serving radio network controller node, and thereafter sends the omnibus release

5 message to base station(s) controlled by the drift radio network controller node with
 6 respect to connections with mobile terminals controlled by the serving radio network
 7 controller node in cells controlled the drift radio network controller node.

1 39. A radio network control (RNC) node of a radio access network of a
 2 telecommunications system which prepares a omnibus release message to release plural
 3 connections handled by the radio access network.

1 40. The radio network control (RNC) node of claim 39, wherein when a first
 2 selected parameter of the omnibus release message has a predetermined value, all radio
 3 connections controlled by the radio network control (RNC) node are released.

1 41. The radio network control (RNC) node of claim 40, wherein when the first
 2 selected parameter is in a reserved range of values, all radio connections controlled by
 3 the radio network control (RNC) node are released.

1 42. The radio network control (RNC) node of claim 41, wherein the radio
 2 network control (RNC) node is a serving radio network control (SRNC) node, and
 3 wherein the serving radio network control (SRNC) node prepares the omnibus release
 4 message upon failure of the serving radio network control (SRNC) node.

1 43. The radio network control (RNC) node of claim 38, wherein the first
 2 selected parameter is included in a mobile terminal global identity information element
 3 of the omnibus release message.

1 44. The radio network control (RNC) node of claim 43, wherein the first
 2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)
 3 information element of the omnibus release message.

1 45. The radio network control (RNC) node of claim 44, wherein the first
 2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)
 3 information element of the omnibus release message.

1 46. The radio network control (RNC) node of claim 39, wherein when a first
 2 selected parameter of the omnibus release message has a first predetermined value and

3 a second selected parameter of the omnibus release message has a second
4 predetermined value, all radio connections in cells controlled by the radio network
5 control (RNC) node are released.

1 47. The radio network control (RNC) node of claim 46, wherein when the first
2 selected parameter is in a first reserved range of values, all radio connections in cells
3 controlled by the radio network control (RNC) node are released.

1 48. The radio network control (RNC) node of claim 46, wherein when the
2 second selected parameter is in a second reserved range of values, all radio connections
3 in cells controlled by the radio network control (RNC) node are released.

1 49. The radio network control (RNC) node of claim 46, wherein the radio
2 network control (RNC) node is a drift radio network control (DRNC) node, and
3 wherein the drift radio network control (DRNC) node prepares the omnibus release
4 message upon failure of the drift radio network control (DRNC) node.

1 50. The radio network control (RNC) node of claim 46, wherein the first
2 selected parameter is included in a mobile terminal global identity information element
3 of the omnibus release message.

1 51. The radio network control (RNC) node of claim 50, wherein the first
2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)
3 information element of the omnibus release message.

1 52. The radio network control (RNC) node of claim 51, wherein the first
2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)
3 information element of the omnibus release message.

1 53. The radio network control (RNC) node of claim 46, wherein the second
2 selected parameter is included in a parameter which identifies a serving radio network
3 control (SRNC) node.

1 54. The radio network control (RNC) node of claim 39, wherein the omnibus
2 release message is transmitted on a common control channel (CCCH) when a mobile
3 terminal is in a CELL_FACH state.

1 55. The radio network control (RNC) node of claim 39, wherein the omnibus
2 release message is transmitted on a paging channel (PCH).

1 56. The radio network control node of claim 39, wherein the radio network
2 control node is a drift radio network control node which receives from a serving radio
3 network control node a request for release of connections with mobile terminals
4 controlled by the serving radio network controller node in cells controlled the drift
5 radio network controller node; and wherein the drift radio network controller node
6 sends the omnibus release message to base station(s) controlled by the drift radio
7 network controller node.

1 57. The radio network control node of claim 39, wherein the radio network
2 control node is a drift radio network control node which receives an indication of a loss
3 of connection with the serving radio network controller node, and which thereafter
4 sends the omnibus release message to base station(s) controlled by the drift radio
5 network controller node with respect to connections with mobile terminals controlled
6 by the serving radio network controller node in cells controlled the drift radio network
7 controller node.

1 58. A mobile terminal which, upon receipt of a release message from a radio
2 access network of a telecommunications system, releases its radio connection with the
3 radio access network when a first selected parameter of the omnibus release message
4 has a predetermined value which is not unique to the mobile terminal.

1 59. The mobile terminal of claim 58, wherein when the first selected parameter
2 is in a reserved range of values, the mobile terminal releases its radio connection with
3 the radio access network.

1 60. The radio access network of claim 58, wherein the first selected parameter is
2 included in a mobile terminal global identity information element of the omnibus
3 release message.

1 61. The mobile terminal of claim 58, wherein the first selected parameter is
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the
3 release message.

1 62. The mobile terminal of claim 61, wherein the first selected parameter is in a
2 Serving Radio Network Temporary Identity (S-RNTI) information element of the
3 release message.

1 63. The mobile terminal of claim 58, wherein the release message is received
2 on a common control channel (CCCH) when the mobile terminal is in a CELL_FACH
3 state.

1 64. The mobile terminal of claim 58, wherein the release message is received on
2 a paging channel (PCH).